2035 Mainline Vision

The 2035 Mainline Vision is shown in **Figure 3**. To provide the ultimate mainline vision for the I-75 South Corridor, all relevant master plans, previous studies, and planned or programmed improvement plans were reviewed and compiled.[1]

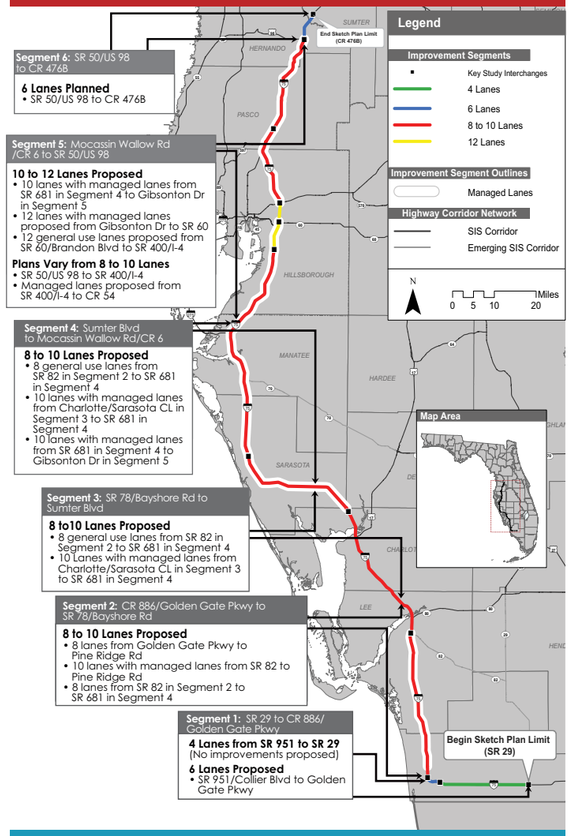
The vast majority of the I-75 South Corridor is currently planned to be an eight to ten lane facility, with managed lanes considered for implementation in most areas. The largest exception to this is the section of I-75 through Charlotte County in which managed lanes are not currently proposed. On both the northern and southern ends of the corridor in Sumter and Collier Counties, the mainline vision includes only a four to six lane segment. In addition, in Hillsborough County, a large stretch of I-75 near the I-4 corridor is planned as a twelve-lane facility.

Most of the plans identified for the I-75 South Corridor will meet future traffic forecast needs. However, a number of segments will require further consideration and prioritization to meet future needs for the corridor:

- While managed lanes (six general purpose/four special use lanes) would be sufficient to address the need for ten lanes from River Road to SR 681 in Sarasota County, the proposed eight lane widening of this same section would not be sufficient to address future projected traffic needs;
- Twelve lanes are anticipated to be needed by 2035 from SR 681 to SR 72/Clark Road and from SR 780/Fruitville Road to CR 610/University Parkway in Sarasota County. The proposed managed lanes (six general use/four special use lanes) will not be sufficient to address future traffic needs in these sections;
- In excess of twelve lanes are needed from Gibsonton Drive to SR 43/US 301 and from SR 60/Brandon Boulevard to SR 400/I-4 in Hillsborough County. The future proposed plans include either a twelve-lane freeway or managed lanes (eight general purpose/four special use lanes). Even with this proposed improvement, the analysis indicates that these sections of roadway will be operating below the adopted LOS; and,
- Twelve lanes are also proposed by 2035 for the section from SR 400/I-4 to CR 581/Bruce B. Downs Boulevard in Hillsborough County and from SR 93/I-275 to SR 56 in Pasco County. Proposed plans for these sections include either a ten-lane freeway or managed lanes (six general purpose/four special use lanes). Even with these improvements, adopted LOS cannot be maintained given future traffic projections. In addition, even if twelve-lanes were implemented between SR 400/I-4 and Fowler Avenue in Hillsborough County, this section will still operate below the adopted LOS.

[1] At the time of this analysis, 2035 LRTP forecasts were not available from MPOs in the study area.

Figure 3: 2035 Mainline Vision



Alternative Options

This mainline vision offers a baseline needs analysis so improvements to the I-75 South Corridor can be efficiently prioritized and scheduled. A number of alternative strategies exist to increase capacity, divert demand, and manage congestion that may be considered by the districts in attempting to meet existing and future needs for this corridor. While no one option may completely satisfy the projected needs, a combination of options may prove to be the most effective means for maximizing this vital corridor.

Alternative strategies that may be explored include:

- Adding capacity to parallel corridors;
- Transportation Systems Management (TSM) and ITS Improvements;
- Special or Managed Lanes;
- Improving Freight Rail Corridors;
- Passenger Rail Services;
- Inter-regional Transit/Commuter Rail Services; and,
- Strengthen Intermodal Connections.

INTERSTATE 75 SOUTH SKETCH INTERSTATE PLAN

2035

Study Overview

I-75 was constructed during the late 1970's and early 1980's, and serves as an integral part of the Strategic Intermodal System (SIS)/Florida Intrastate Highway System (FIHS), moving people and goods along the south western coast of Florida. Traversing nine counties and eight metropolitan planning organizations (MPOs), the I-75 South Corridor, measures approximately 227-miles in length. The study area limits extend from State Road (SR) 29 in Collier County north to County Road (CR) 476B in Sumter County.

The Florida Department of Transportation (FDOT) has undertaken a Sketch Interstate Plan (SIP) to compile and consolidate studies conducted within the I-75 South Corridor and to identify updated traffic forecasts. The study will provide FDOT with a strategic management vision of the entire corridor. The result of this SIP is the Mainline Vision, which evaluates conditions within the I-75 corridor for base year (2008) and future year (2035) conditions, documents capacity deficiencies, and identifies proposed improvements from previous studies and planning documents to satisfy these needs.

This study was conducted over a two-year period from 2009 to 2011. Base year traffic data was collected along with 2030 traffic projections from each FDOT District and projected to 2035 for the purposes of this study. In many cases, data sets have now been updated to reflect newer traffic information and forecasts; however, the overall results from the analysis remain valid for the purposes of this study.

Traffic & Roadway Conditions

A planning level of service analysis was conducted for the I-75 corridor using Florida's 2007 Generalized Service Volume Tables for Level of Service. Traffic volumes on I-75 vary throughout the study corridor, as shown in **Figure 1**. The section with the lowest existing traffic is in Collier County where the Average Annual Daily Traffic (AADT) is as low as 19,000 vehicles per day (vpd). The most heavily travelled section is in Hillsborough County where the AADT was found to be as high as 152,000 vpd. Seven sections, totaling approximately 48 miles out of the 227-mile long corridor, typically operated at unacceptable levels of service sometime during the day in 2008.

By 2035, traffic volumes are forecast to increase dramatically on I-75. Daily traffic in Collier County, which was previously at 19,000 vpd at one segment, would increase to as high as 58,000 vpd. The most heavily travelled sections in Hillsborough County could increase from 152,000 to 225,000, and the segment from Bruce B. Downs Road to SR 93/I-275 could increase by as much as six times the 2008 traffic levels. Traffic at the north end of the corridor, in Sumter County, would increase from 40,000 vpd to approximately 79,000 vpd.

Over half of the corridor (as much as 141-miles) would operate at an unacceptable level of service, sometime during the day by 2035. This assumes FDOT only made those improvements currently listed in the Five Year Work Program. These poor operating levels would mean long travel delays, stop and go traffic during peak travel periods, potentially higher accident rates, and higher costs for goods shipped by truck.

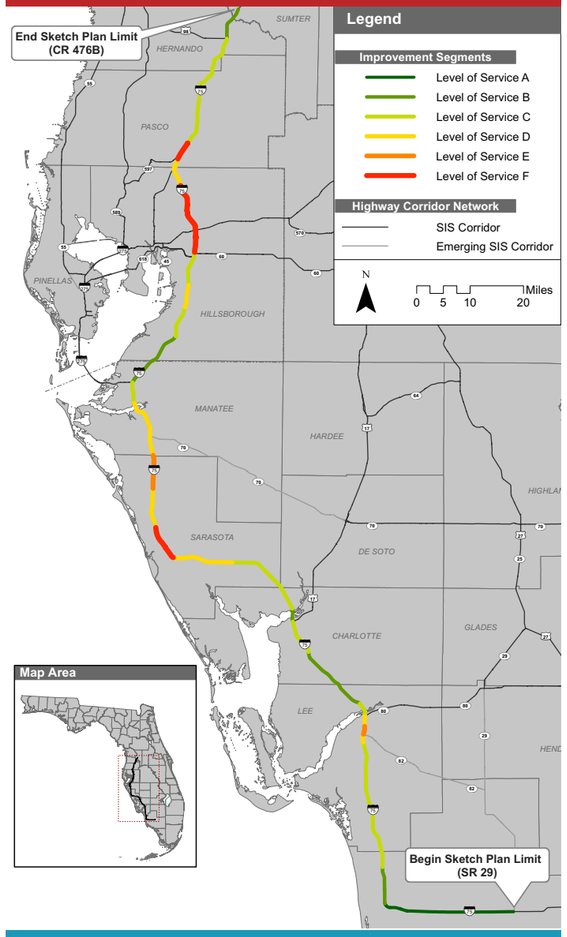
Interchanges

There are more than 50 interchanges and seven different interchange varieties located within the study area. The majority of the interchanges are of a "diamond" type, and five interchanges are considered system interchanges that are free flowing with no local access. These include I-75 at the following crossroads: SR 681, I-275 (south), Lee Roy Selmon Expressway, I-4, and I-275 (north).

Twenty interchange studies were reviewed in addition to previous PD&E interchange recommendations, FDOT's Five Year Work Program (FY 2010-2014), and FY 2010-2014 Transportation Improvement Programs (TIPs) from MPOs in the study area.

Improvement recommendations for 25 interchanges were identified as part of this review and were based on the best available information at the time of the review. None of the major system interchanges were identified as requiring improvements through the 2035 horizon year.

Figure 1: 2008 Level of Service



Bridges

All bridges in the study corridor are rated as being in fair or better condition. There are four structures in the I-75 South Corridor that should be considered a priority for improvement due to their structural condition: New Castle Waterway Southbound (SB) (Sarasota County), Moccasin Wallow Road (Manatee County), 24th Street (Hillsborough County), and SR 52 SB (Pasco County). In addition, numerous bridges do not meet FDOT's minimum vertical clearance standard of 16.5 feet. The current vertical clearance at Croom Rital Road (SB) in Hernando County is listed as 14.3 feet and should be considered as a priority for improvement.

Intermodal Connections

I-75 is designated as a Strategic Intermodal System (SIS) highway corridor, in part because it supports regional and statewide freight movements. As a SIS Corridor, I-75 promotes Florida's economic competitiveness by enhancing the modal links to airports, seaports, rail, and bus stations.

Within the project corridor, there are nine SIS Hubs (as shown on **Figure 2**), including two seaports, three commercial service airports, three intermodal passenger terminals, and one intermodal freight-rail terminal. Mentionable intermodal connections and projects noted adjacent to the corridor include:

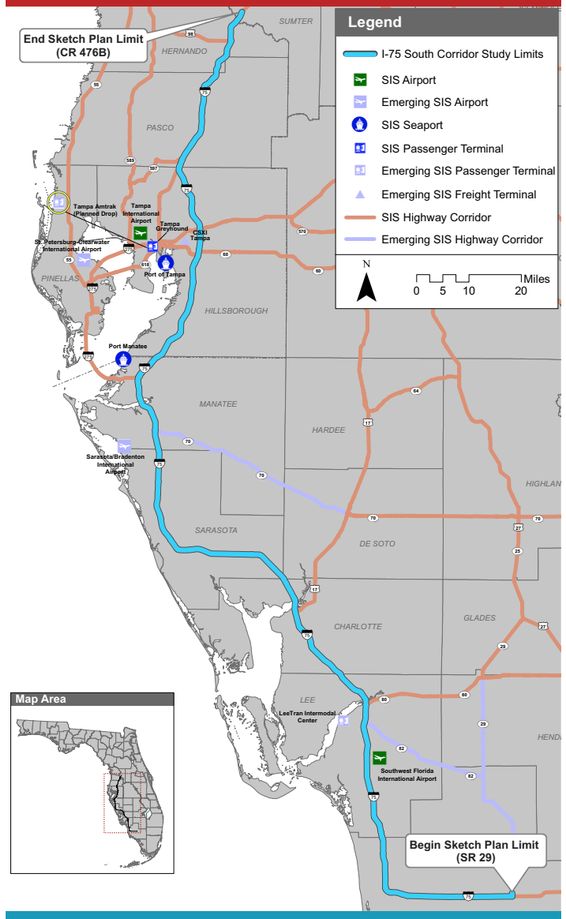
- SR 29 in Collier County is an Emerging SIS Highway Corridor. Traffic volumes in this segment of the corridor do not indicate improvements needed at this time, but should continue to be reviewed to ensure connection needs between SR 29 and I-75 are met now and into the future;

- Strengthening intermodal connections to the Southwest Florida International Airport (located between Alico Road and Daniels Parkway in Lee County) through an interchange modification and collector-distributor system at the airport has been identified in the FDOT Five Year Work Program. Construction of this connector system is included in the Second Five Year Work Program for FY 2019. No improvements to the existing LeeTran Intermodal Center were noted in the review of MPO and FDOT planning documents;

- The Sarasota/Bradenton International Airport connects to the I-75 South Corridor through University Parkway and Port Manatee. New limited access facilities that will help connections to and from I-75 are also included in the financially feasible plan at US 301 and from Port Manatee to I-75 (Port Manatee Connector). The new facility at US 301 is not yet funded in the FDOT Work Programs or SIS Cost Feasible Plan; however, interchange modifications at this location have been programmed into the SIS Cost Feasible Plan. The new Port Manatee Connector is included in the SIS Cost Feasible Plan for 2031 to 2035; and,

- Intermodal connections are essential along the corridor in Hillsborough County, where five SIS hubs are accessible from various I-75 interchanges. It was noted in the review of intermodal plans that there is a planned I-4 connector to Lee Roy Selmon that may strengthen intermodal connections in this segment. No I-75 improvements are proposed in the plans reviewed specifically for these intermodal connections; however, interchange improvements at CR 672/ Big Bend Road and SR 400/I-4 will aid intermodal connectivity.

Figure 2: SIS Facilities



Intelligent Transportation System (ITS)

Improving the ITS system and transportation system infrastructure will enhance FDOT's ability to manage traffic flow, reduce congestion, provide information to travelers, enhance efficiency, improve incident management, and most importantly, increase safety along I-75. Four ITS improvement projects are programmed in the most current MPO Transportation Improvement Plans, and they include: Charlotte County, Hillsborough County from the Manatee County Line to Bloomingdale Avenue, Hillsborough County from Fowler Avenue (SR 582) to the Pasco County Line, and Pasco County.

INTERSTATE 75 SOUTH SIP